

Claims:

1-26. Canceled.

27. (New) A fused cast refractory composition having high electrical resistivity comprising 0.8 wt.% to 2.5 wt.% Al_2O_3 , 4.0 wt.% to 10.0 wt.% SiO_2 , 86 wt.% to 95 wt.% ZrO_2 , 0.1 wt.% to 1.2 wt.% B_2O_3 , up to 0.04 wt.% Na_2O , up to 0.19 wt.% CaO , up to 0.1% Fe_2O_3 and up to 0.25% TiO_2 .

28. (New) The refractory composition of claim 27, wherein the composition comprises 0.9 wt.% to 2.0 wt.% Al_2O_3 .

29. (New) The refractory composition of claim 28, wherein the composition comprises 0.95 wt.% to 1.85 wt.% Al_2O_3 .

30. (New) The refractory composition of claim 27, wherein the composition comprises 4.4 wt.% to 8.8 wt.% SiO_2 .

31. (New) The refractory composition of claim 30, wherein the composition comprises 6 wt.% to 8 wt.% SiO_2 .

32. (New) The refractory composition of claim 27, wherein the composition comprises 4.4 wt.% to 8.8 wt.% SiO_2 , and 88 wt.% to 95 wt.% ZrO_2 .

33. (New) The refractory composition of claim 27, wherein the composition comprises 89.3% to 93.6% ZrO_2 .

34. (New) The refractory composition of claim 27, wherein the composition comprises 0.3% to 0.9% B_2O_3 .

35. (New) The refractory composition of claim 27, wherein the composition comprises

less than 0.02 wt.% Na₂O.

36. (New) The refractory composition of claim 35, wherein the composition comprises less than 0.1 wt.% CaO.

37. (New) The refractory composition of claim 27, wherein the composition includes up to 0.25 wt.% from a group consisting of CaO, NaO and MgO.

38. (New) A refractory composition having high electrical resistivity consisting essentially of 0.8 wt.% to 2.5 wt.% Al₂O₃, 4.0 wt.% to 10.0 wt.% SiO₂, 86 wt.% to 95 wt.% ZrO₂, 0.1 wt.% to 1.2 wt.% B₂O₃, up to 0.04 wt.% up to Na₂O, 0.19 wt.% CaO, up to 0.1 wt.% Fe₂O₃ and up to 0.25 wt.% TiO₂.

39. (New) The refractory composition of claim 38, wherein the composition includes of 0.95 wt.% to 1.85 wt.% Al₂O₃, 4.4 wt.% to 8.8 wt.% SiO₂, 89.3 wt.% to 93.6 wt.% ZrO₂, and 0.3 wt.% to 0.9 wt.% B₂O₃.

40. (New) A refractory composition having high electrical resistivity consisting essentially of 0.8 wt.% to 2.5 wt.% Al₂O₃, 4.0 wt.% to 10.0 wt.% SiO₂, 86 wt.% to 95 wt.% ZrO₂, 0.1 wt.% to 1.2 wt.% B₂O₃, up to 0.1 wt.% Fe₂O₃, up to 0.25 wt.% TiO₂, and up to 0.25 wt.% of a group consisting of Na₂O, CaO and MgO.

41. (New) The refractory composition of claim 40, wherein the composition includes of 0.96% to 1.1% Al₂O₃, 6.6% to 8.8% SiO₂, 89.3% to 91.2% ZrO₂, 0.6% to 0.9% B₂O₃, up to 0.1% CaO, and up to 0.1% TiO₂.